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To:	From:
Examiner David England	Syed Jafar Ali (Reg. No. 58,780)
CC:	Date:
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Re:	Your Reference Number
Proposed Amendment	Application Serial No. 09/577,224

☐ URGENT ☑ FOR REVIEW ☑ PLEASE REPLY

Dear Examiner England,

Please find attached a Proposed Amendment for U.S. Patent Application Serial No. 09/577,224, which includes proposed claim amendments based on our discussion earlier today. Please let us know whether the attached Proposed Amendment is acceptable, and we will then file the terminal disclaimer.

Thank you for your assistance in advancing the prosecution of this application. If you need anything further from us in the meantime, please do not hesitate to contact us. Otherwise, we will look forward to your comments regarding the attached Proposed Amendment.

Best regards,

Jafar Ali

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT :	Lundy LEWIS	CONFIRMATION NO. :	4214
SERIAL NUMBER :	09/577,224	EXAMINER :	David E. England
FILING DATE :	May 23, 2000	ART UNIT :	2443
FOR :	METHOD AND APPARATUS FOR REACTIVE AND DELIBERATIVE SERVICE LEVEL MANAGEMENT (SLM)		

PROPOSED AMENDMENT

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Further to the telephonic discussion with the Examiner on **October 26, 2009**, the Examiner is hereby authorized to amend the above-identified application as follows:

Amendments to the Claims begin on page **2** of this paper.

Remarks/Arguments begin on page **10** of this paper.

It is not believed that extensions of time or fees for net addition of claims are required beyond those that may otherwise be provided for in documents accompanying this paper. However, if additional extensions of time are necessary to prevent abandonment of this application, then such extensions of time are hereby petitioned for under 37 C.F.R. § 1.136(a), and any fees required therefore (including fees for net addition of claims) are hereby authorized to be charged to our Deposit Account No. 033975 (**Ref. No. 019287-0317296**).

PROPOSED AMENDMENT

Proposed Claim Amendments: The Examiner is hereby authorized to replace all prior versions and listings of claims with the following proposed listing of claims.

PROPOSED LISTING OF CLAIMS:

1. **(Proposed Amended)** A method for reactive and deliberative service level management, comprising:

providing a service over a network having a plurality of network components that support the service, wherein performance of the service depends on performances of the plurality of network components that support the service, and wherein the service has a state that represents whether the performance of the service meets or exceeds a service level identified in a service level agreement;

extracting a plurality of ~~one or more~~ component parameter values from the plurality of network components that support the service across a plurality of domains of the network using a plurality of sensors respectively coupled to the plurality of network components that support the service;

monitoring the plurality of component parameter values extracted from the plurality of network components that support the service using a plurality of monitoring agents, wherein each of the plurality of monitoring agents are configured to monitor a subset of the plurality of extracted component parameter values in a respective one ~~domain~~ of [[a]] the plurality of domains of the network, detect one or more intra-domain events in the respective domain as a function of the component parameter values monitored in the respective domain, and generate one or more intra-domain alarms in the respective domain as a function of the intra-domain events detected in the respective domain;

correlating the intra-domain alarms that each of the plurality of monitoring agents generate ~~generated~~ in each of the respective ~~plurality of~~ domains of the network using an alarm correlation agent, wherein the alarm correlation agent is configured to correlate the intra-domain alarms generated in each of the respective domains of the network to generate one or more inter-domain alarms across the plurality of domains of the network; and

analyzing causes of the intra-domain alarms generated in each of the respective domains of the network and the inter-domain alarms generated across the plurality of domains of the network using an enterprise management system, wherein the intra-domain alarms and the inter-domain alarms indicate one or more of a degradation or a potential degradation in the performance of the service relative to the service level identified in the service level agreement.

2. (**Cancelled**)

3. (**Proposed Amended**) The method of claim 1, further comprising:

mapping the inter-domain alarms generated across the plurality of domains of the network to a service parameter that represents the state of the service, wherein the service parameter has a value that indicates whether the performance of the service meets or exceeds the service level identified in the service level agreement; and

displaying information relating to the ~~the~~ service, wherein the displayed information includes at least one of availability, faults, configuration, integrity, security, reliability, performance, or the service level associated with the service.

4. (**Cancelled**)

5. (**Previously Presented**) The method of claim 1, wherein analyzing the causes of the intra-domain alarms and the inter-domain alarms includes executing one or more data mining algorithms that discover respective relationships between the component parameter values and each of the intra-domain alarms and the inter-domain alarms.

6. (**Previously Presented**) The method of claim 3, further comprising determining that the state of the service satisfies the service level agreement in response to the value for the service parameter meeting or exceeding the service level identified in the service level agreement.

7-22. (**Cancelled**)

23. (**Proposed Amended**) A method for reactive and deliberative service level management, comprising:

providing a service over a network having a plurality of network components that support the service, wherein performance of the service depends on performances of the plurality of network components that support the service, and wherein the service has a state expressed as a range of numeric values that represent whether the performance of the service meets or exceeds a service level identified in a service level agreement;

extracting a plurality of ~~one or more~~ component parameter values from the plurality of network components that support the service across a plurality of domains of the network using a plurality of sensors respectively coupled to the plurality of network components that support the service;

monitoring the plurality of component parameter values extracted from the plurality of network components that support the service using a plurality of monitoring agents, wherein each of the plurality of monitoring agents are configured to monitor a subset of the plurality of extracted component parameter values in a respective one of the plurality of domains of the network, detect one or more intra-domain events in the respective domain as a function of the ~~monitored~~ subset of the component parameter values monitored in the respective domain, and generate one or more intra-domain alarms in the respective domain as a function of the ~~detected~~ intra-domain events detected in the respective domain;

correlating the intra-domain alarms that each of ~~generated by~~ the plurality of monitoring agents generate in each of the respective domains of the network using an alarm correlation agent, wherein the alarm correlation agent is configured to correlate the intra-domain alarms generated in each of the respective domains of the network to generate one or more inter-domain alarms across [[a]] the plurality of domains of the network;

mapping the inter-domain alarms generated across the plurality of domains of the network to a service parameter that represents the state of the service, wherein the service parameter has a numeric value in the range of numeric values that indicates whether the

performance of the service meets or exceeds the service level identified in the service level agreement; and

monitoring the numeric value of the service parameter using an enterprise management system to provide service level management for the service provided over the network.

24. (**Previously Presented**) The method of claim 23, wherein providing service level management for the service provided over the network includes determining that the state of the service satisfies the service level agreement in response to the numeric value of the service parameter meeting or exceeding the service level identified in the service level agreement.

25. (**Previously Presented**) The method of claim 23, wherein providing service level management for the service provided over the network includes determining that the state of the service satisfies the service level agreement in response to the numeric value of the service parameter meeting or exceeding the service level identified in the service level agreement.

26. (**Cancelled**)

27. (**Proposed Amended**) The method of claim 23, further comprising:

determining that the numeric value of the service parameter indicates one or more of a degradation, a potential degradation, or an imminent degradation in the performance of the service relative to the service level identified in the service level agreement; and

issuing one or more instructions that effect a change to one or more of the component parameter values in response to determining that the numeric value of the service parameter indicates any of the ~~the~~ degradation, the potential degradation, or the imminent degradation in the performance of the service relative to the service level identified in the service level agreement, wherein the one or more instructions autonomously cause the numeric value of the service parameter to meet or exceed the service level identified in the service level agreement.

28. (**Previously Presented**) The method of claim 3, further comprising determining that the state of the service does not satisfy the service level agreement in response to the value for the service parameter not meeting or exceeding the service level identified in the service level agreement.

29. (**Previously Presented**) The method of claim 1, wherein each of the plurality of monitoring agents are further configured to detect the one or more intra-domain events based on one or more policies and rules associated with the service.

30. (**Previously Presented**) The method of claim 29, wherein each of the plurality of monitoring agents are further configured to generate the one or more intra-domain alarms based on the one or more policies and rules associated with the service.

31. (**Previously Presented**) The method of claim 30, wherein the alarm correlation agent is further configured to generate the one or more inter-domain alarms based on the one or more policies and rules associated with the service.

32. (**Previously Presented**) The method of claim 5, wherein analyzing the causes of the intra-domain alarms and the inter-domain alarms further includes:

executing the one or more data mining algorithms to discover at least one of the intra-domains alarms that caused one or more of the inter-domain alarms;

executing the one or more data mining algorithms to discover at least one of the intra-domain events that caused the at least one intra-domain alarm; and

executing the one or more data mining algorithms to discover at least one of the component parameter values that caused the at least one intra-domain event.

33. (**Previously Presented**) The method of claim 5, wherein the one or more data mining algorithms further discover cause and effect relationships among the plurality of network

components that support the service to represent the respective relationships between the component parameter values and each of the intra-domain alarms and the inter-domain alarms.

34. (**Previously Presented**) The method of claim 5, wherein the one or more data mining algorithms further discover one or more of the component parameter values that distinguish whether the performance of the service meets or exceeds the service level identified in the service level agreement.

35-36. (**Cancelled**)

37. (**Proposed Amended**) A system for reactive and deliberative service level management, comprising:

a network having a plurality of network components that support a service provided over the network, wherein performance of the service depends upon performances of the plurality of network components that support the service, and wherein the service has a state that represents whether the performance of the service meets or exceeds a service level identified in a service level agreement;

a plurality of sensors respectively coupled to the plurality of network components that support the service, wherein the plurality of sensors are configured to extract a plurality of ~~one or more~~ component parameter values from the plurality of network components that support the service across a plurality of domains of the network;

a plurality of monitoring agents communicatively coupled to the plurality of sensors, wherein each of the plurality of monitoring agents are configured to:

monitor a subset of plurality of the extracted component parameter values in a respective one ~~domain~~ of [[a]] the plurality of domains of the network;

detect one or more intra-domain events in the respective domain as a function of the component parameter values monitored in the respective domain; and

generate one or more intra-domain alarms in the respective domain as a function of the intra-domain events detected in the respective domain;

an alarm correlation agent configured to correlate the intra-domain alarms that each of the plurality of monitoring agents generate ~~generated~~ in each of the respective ~~plurality of~~ domains of the network to generate one or more inter-domain alarms across the plurality of domains of the network; and

an enterprise management system configured to analyze causes of the intra-domain alarms generated in each of the respective domains of the network and the inter-domain alarms generated across the plurality of domains of the network, wherein the intra-domain alarms and the inter-domain alarms indicate one or more of a degradation or a potential degradation in the performance of the service relative to the service level identified in the service level agreement.

38. (**Proposed Amended**) A system for reactive and deliberative service level management, comprising:

a network having a plurality of network components that support a service provided over the network, wherein performance of the service depends upon performances of the plurality of network components that support the service, and wherein the service has a state expressed as a range of numeric values that represent whether the performance of the service meets or exceeds a service level identified in a service level agreement;

a plurality of sensors respectively coupled to the plurality of network components that support the service, wherein the plurality of sensors are configured to extract a plurality of ~~one or more~~ component parameter values from the plurality of network components that support the service across a plurality of domains of the network;

a plurality of monitoring agents communicatively coupled to the plurality of sensors, wherein the plurality of monitoring agents are configured to:

monitor a subset of the plurality of extracted component parameter values in a respective one of the plurality of domains of the network;

detect one or more intra-domain events in the respective domain as a function of the ~~monitored~~ subset of the component parameter values monitored in the respective domain; and

generate one or more intra-domain alarms in the respective domain as a function of the ~~detected~~ intra-domain events detected in the respective domain;

an alarm correlation agent configured to correlate the intra-domain alarms that each of ~~generated by~~ the plurality of monitoring agents generate in each of the respective domains of the network to generate one or more inter-domain alarms across [[a]] the plurality of domains of the network; and

an enterprise management system configured to:

map the inter-domain alarms generated across the plurality of domains of the network to a service parameter that represents the state of the service, wherein the service parameter has a numeric value in the range of numeric values that indicates whether the performance of the service meets or exceeds the service level identified in the service level agreement; and

monitor the numeric value of the service parameter to provide service level management for the service provided over the network.

REMARKS

Upon entry of the foregoing Proposed Amendment, claims 1, 3, 5-6, 23-25, 27-34, and 37-38 would be pending in the application. Claims 1, 3, 23, 27, and 37-38 would be amended. No claims would be cancelled or newly added. Applicant believes that this Proposed Amendment would not add new matter. In view of the foregoing Proposed Amendment and the following Remarks, allowance of all the pending claims is requested.

EXAMINER INTERVIEW

In a telephonic discussion with the Examiner on October 26, 2009, the Examiner proposed amending the claims as indicated above to place the application in condition for allowance. As such, the Examiner is hereby authorized to enter the foregoing Proposed Amendment for the sole purpose of placing the application in condition for allowance. Notice to that effect is respectfully requested.

In addition, Applicant notes that during the telephonic discussion with the Examiner, the Examiner indicated that a terminal disclaimer will be required with respect to U.S. Patent No. 7,600,007, co-pending U.S. Patent Application Serial No. 09/577,231, and co-pending U.S. Patent Application Serial No. 09/577,232. As such, Applicant will file a terminal disclaimer to this effect in due course to obviate any potential non-statutory double patenting rejections.

Furthermore, Applicant notes that the filing of a terminal disclaimer to obviate a potential rejection based on non-statutory double patenting does not constitute an admission of the propriety of the potential rejection. *See Quad Environmental Technologies Corp. v. Union Sanitary District*, 946 F.2d 870 (Fed. Cir. 1991).

CONCLUSION

Having addressed each of the issues raised by the Examiner during the telephonic discussion with the Examiner on October 26, 2009, it is respectfully submitted that the application is in condition for allowance. Notice to that effect is respectfully requested.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Date: **October 26, 2009**

Respectfully submitted,

By: _____

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